

CLAIMS

1. A method of diagnosing a computer system after a failure comprising:
preserving the state of a first set of system resources after the failure occurs in
the computer system;
accessing the computer system by utilizing a second set of system resources;
and
diagnosing the failure by analyzing one or more resources from the first set of
system resources.
2. The method of claim 1 further comprising:
maintaining one or more lists of the first set of system resources.
3. The method of claim 2 in which the one or more lists are linked lists.
4. The method of claim 1 in which the first set of system resources comprise
processing entities.
5. The method of claim 4 in which the processing entities comprise processes
which are categorized into process types.

10/8. The method of claim 9 in which the act of preserving the state of the first set of the system resources comprises suspending the state of one or more of the processes in the first set of system resources.

7. The method of claim 6 in which the one or more processes to suspend are suspended by being entered into an idle loop.

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8. The method of claim ~~6~~¹⁰ in which the one or more processes to suspend are suspended by an operating system scheduler.

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9. The method of claim ~~6~~¹⁰ in which the one or more processes to suspend are selected based upon their process type.

10. The method of claim 1 in which the second set of system resources comprise
15 system resources that have been set aside for diagnostic purposes.

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~~11.~~ The method of claim 1 in which the second set of system resources comprises redundant hardware/software components.

12. A method of diagnosing a computer system after a failure comprising:
detecting a failure on a first computer system;

5 diagnosing the failure by analyzing the one or more resources.

10 system after the failure.

15 ¹⁶~~15~~. The method of claim ¹⁴~~12~~ in which the one or more resources comprise one or more processing entities.

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~~20~~¹⁷. The method of claim ~~12~~¹⁴ further comprising the act of categorizing the failure into a failure type, and in which the failure type corresponds to the choice of the one or more resources to suspend.

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diagnosing the failure by analyzing one or more resources from the first set of
system resources.

22. A medium readable by a processor, the medium being stored thereon a
5 sequence of instruction which, when executed by the processor, causes the execution
of a process of preserving the state of a computer system after a failure by performing:
- detecting a failure on a first computer system;
 - implementing fail-over to a second computer system after detecting the failure
on the first computer system;
 - 10 preserving the state of one or more resources on the first computer system;
 - accessing the first computer system to diagnose the failure; and
 - diagnosing the failure by analyzing the one or more resources.

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